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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/469,652	12/22/1999	JONATHAN J. WIERER JR.	10992873-1	5235

32566 7590 09/25/2003

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EXAMINER

CHU, CHRIS C

ART UNIT PAPER NUMBER

2815

DATE MAILED: 09/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/469,652

Applicant(s)

WIERER ET AL.

Examiner

Chris C. Chu

Art Unit

2815

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 09 September 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1, 3, 5 - 11 and 14 - 20.

Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
10. ☐ Other: _____

EDDIE LEE
SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER, 2800
Paper No. 24

Continuation of 5. does NOT place the application in condition for allowance because: Applicant argues "Ishikawa does not teach a barrier layer external to the semiconductor heterostructure, as recited in claim 1." This argument is not persuasive. Ishikawa clearly shows in Fig. 7 the barrier layer (128) external to the semiconductor heterostructure (121), as recited in claim 1. Thus, Biing-Jye, Hunt and Ishikawa teach all the elements of claim 1. Further, since the heterostructure (InGaN) of Biing-Jye is located between p and n contacts, Biing-Jye meets the bound of claim 8. Furthermore, applicant does not specifically claimed in claim 6 or in claim 1 that the ohmic contact in claim 6 is the multi-layered contact or not. Therefore, the rejection meets the bound of claim 6. The arguments against to claim 11 is not persuasive because Sugiura et al. discloses in column 5, lines 18 ~ 32 to achieve good and low resistance ohmic contact by controlling the oxygen and carbon concentration on the uppermost surface of a growing layer not the materials of the contact layer. Therefore, Hunt and Sugiura are combined to successfully yield a contact with both the claimed reflectivity and the claimed contact resistance.

For the above reasons, the rejection is maintained.